

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P. O. Box 272400
Fort Collins, Colorado 80527-2400

PATENT APPLICATION

ATTORNEY DOCKET NO. 10003465-1

IN THE
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Frederick A. Perner

Confirmation No.: 3446

Application No.: 09/892,251

Examiner: Dougherty

Filing Date: 6/26/2001

Group Art Unit: 2834

Title: POWER SUPPLY INCLUDING PYROELECTRIC CAPACITOR

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COMMISSIONER FOR PATENTS
Washington, D.C. 20231

TECHNOLOGY CENTER 2800

TRANSMITTAL LETTER FOR RESPONSE/AMENDMENT

Sir:

Transmitted herewith is/are the following in the above-identified application:

- (X) Response/Amendment () Petition to extend time to respond
() New fee as calculated below () Supplemental Declaration
(X) No additional fee (Address envelope to "Box Non-Fee Amendments")
() Other: (fee \$)

CLAIMS AS AMENDED BY OTHER THAN A SMALL ENTITY						
(1) FOR	(2) CLAIMS REMAINING AFTER AMENDMENT	(3) NUMBER EXTRA	(4) HIGHEST NUMBER PREVIOUSLY PAID FOR	(5) PRESENT EXTRA	(6) RATE	(7) ADDITIONAL FEES
TOTAL CLAIMS	19	MINUS	20	= 0	X \$18	\$ 0
INDEP. CLAIMS	4	MINUS	4	= 0	X \$84	\$ 0
[] FIRST PRESENTATION OF A MULTIPLE DEPENDENT CLAIM					+ \$280	\$ 0
EXTENSION FEE	1ST MONTH \$110.00	2ND MONTH \$410.00	3RD MONTH \$930.00	4TH MONTH \$1450.00		\$ 0
OTHER FEES						\$
TOTAL ADDITIONAL FEE FOR THIS AMENDMENT						\$ 0

Charge \$ 0 to Deposit Account 08-2025. At any time during the pendency of this application, please charge any fees required or credit any overpayment to Deposit Account 08-2025 pursuant to 37 CFR 1.25. Additionally please charge any fees to Deposit Account 08-2025 under 37 CFR 1.16, 1.17, 1.19, 1.20 and 1.21. ~~A duplicate copy of this sheet is enclosed.~~

Respectfully submitted,

Frederick A. Perner

By

Hugh P. Gortler

Attorney/Agent for Applicant(s)
Reg. No. 33,890

Date: 4/30/2003

(X) hereby certify that this paper is being transmitted
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Typed Name: Hugh P. Gortler

Signature:

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- Attach as First Page to Transmitted Papers -

Telephone No.: (949) 454-0898

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PATENT
PDNO 10003465-1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: : Confirmation No. 3446
Frederick A. Perner :
Serial No. 09/892,251 : Examiner M. Dougherty
Filed: June 26, 2001 : Group Art Unit: 2834
For: POWER SUPPLY INCLUDING PYROELECTRIC CAPACITOR

Assistant Commissioner for Patents
Washington, D.C. 20231

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RESPONSE TO OFFICE ACTION DATED MARCH 13, 2003

APR 30 2003

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Claims 1-19 are pending in this application.

Claims 1, 2 and 5 are rejected.

Claims 3, 4 and 6-19 are objected to.

The applicant is pleased to learn that claims 3, 4 and 6-19 contain allowable subject matter. The examiner objected to claims 3-4 and 6-19 for depending from rejected base claims, but stated that these claims would be allowed if rewritten in independent form.

Claims 9 and 15 are base claims. Therefore, claims 9-19 should be allowed.

Claims 3-4 and 6-8 depend from base claim 1, which is rejected. However, claims 3-4 and 6-8 have not been rewritten in independent form because the rejection of claim 1 is respectfully traversed.

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Claim 1 is rejected under 35 U.S.C. §102(b) as being anticipated by Pulvari.U.S. Patent No. 4,365,106. Claims 1, 2 and 5 are rejected under 35 U.S.C. §103(a) as being unpatentable over Pulvari in view of Ikura et al. U.S. Patent No. 6,528,898.

Claim 1 recites an integrated circuit comprising a regulated power supply including a pyroelectric capacitor.

Pulvari discloses a solar energy converter sensing device including a semiconductor layer 11 and ferroelectric layer 10 sandwiched between electrodes 15, 16 (Figs. 1-2 and col. 2, lines 11-15). Pulvari states that this device can convert absorbed thermal energy to an electric charge.

Figure 3 of Pulvari shows an electrode 16' on a glass or plastic substrate 14. The substrate functions as a lens (col. 2, lines 47-52). Figure 4 of Pulvari shows ferroelectric and semiconductor capacitors that share a common electrode 17 (col. 3, lines 31-35). Figure 5 shows an exemplary application for the device: on a leaf of a tree (col. 3, lines 53-55).

Pulvari does not teach or suggest a pyroelectric capacitor that is used as part of regulated power supply for an integrated circuit. Pulvari does not disclose a regulated power supply. Pulvari does not even disclose an integrated circuit. Therefore, claim1 and its dependent claims 2-8 should be allowed over Pulvari alone.

Ikura et al. disclose a multi-layered stack of thin pyroelectric films for converting heat to electrical energy; and a voltage controller for providing a synchronization of the thermal and electric cycling of the pyroelectric films (col. 3, lines 5-20). Thermal cycles are applied to the stack by supplying hot and cold

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water (Figs. 2-3 and col. 4, lines 29-31). The system is applicable to industries that emit various grades of waste heat include power plants, incineration plants, pulp mills, refineries and chemical plants (col. 8, lines 47-67).


Ikura et al. do not teach or suggest a pyroelectric capacitor that is used as part of regulated power supply for an integrated circuit. They do not teach or suggest a regulated power supply. They do not even teach or suggest an integrated circuit. Therefore, claim1 and its dependent claims 2-8 should be allowed over Ikura et al. alone or in combination with Pulvari.

The Examiner is respectfully requested to withdraw the rejections and issue a notice of allowability. If any issues remain, the Examiner is invited to contact the undersigned.

Respectfully submitted, FAX RECEIVED

APR 30 2003

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office on April 30, 2003.


Hugh P. Gortler
Hugh P. Gortler
Reg. No. 33,890

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Hewlett-Packard Company
Intellectual Property Administration
P.O. Box 272400
Fort Collins, Colorado 80527-2400

(949) 454-0898

Date: April 30, 2003